

HIGH-DENSITY SPLIT-GATE FINFET

Abstract

Disclosed is a method and structure for forming a split-gate fin-type field effect transistor (FinFET). The invention produces a split-gate fin-type field effect transistor (FinFET) that has parallel fin structures. Each of the fin structures has a source region at one end, a drain region at the other end, and a channel region in the middle portion. Back gate conductors are positioned between channel regions of alternating pairs of the fin structures and front gate conductors are positioned between channel regions of opposite alternating pairs of the fin structures. Thus, the back gate conductors and the front gate conductors are alternatively interdigitated between channel regions of the fin structures.